SANITARY SEWAGE SYSTEMS OPERATIONAL PROCEDURES

Introduction

The Sewer Division of the Public Works Department maintains the City's sanitary sewer system. The system is designed to transport wastewater to Trunk Sewers operated by the Sanitation Districts of Los Angeles County for further transportation, treatment and eventual discharge. Failure at any point within either the City's or the County's system can result in a spill of raw sewage which could threaten public health and contaminate the environment. The same threat-scenario is true of spills that may originate from private disposal systems (septic tanks and / or cesspools) or private property (blocked or failed private property sewer laterals).

Purpose

To reduce the potential impact of City sanitary sewage system operations on storm water quality, to the maximum extent practicable, by ensuring that:

1) sewage system overflows or leaks do not enter the storm drainage system,

2) potential and actual sanitary sewage blockages are remediated and suspected cross-connections are investigated, and

3) public health officials are notified when there is a threat to public health.

Scope

These operational procedures are applicable for all sanitary sewer pipes and pump stations owned by the City. In addition, the "Spill Response" provisions shall also pertain for all private facility or other agency discharges that threaten to enter the City's storm drainage system or other receiving waters.

SEWAGE SPILL RESPONSE PROCEDURES

General Response Procedures

The three fundamental phases of all responses to a sanitary sewer spill are: **CONTAIN, CONTROL and CLEANUP.**

The first personnel on scene are to **contain** the spill or, in other words, to keep it from entering the storm drainage system or other receiving waters. This may be done in any number of ways including the use of sand or soil dikes, sandbags, or by plugging the outlet pipe of a catch basin.

Once the spill is contained, it needs to be brought under **control**. That is, the impacted line must be relieved (the blockage removed) or bypassed (pumped to the next flowing manhole) if the line has failed.

The third and final step of the response is the **cleanup.** All surfaces touched by the spill must be washed down, disinfected and the run-off contained and removed for proper disposal.

Initial Spill Response Procedures

1. The Maintenance Supervisor or designee thereof shall be immediately dispatched to the site to take control of the scene as the Incident Commander. Field crews will be immediately prepared to respond with all available equipment including diking materials, sewer bypass pumps, vacuum trucks and traffic control equipment.

2. The Incident Commander shall assess the magnitude of the spill by estimating the gallons per minute of the flow or by the accumulation of spillage. If any sewage enters the storm drain system, immediately notify L.A. County Public Works, Flood Control Division. If the spill exceeds 1,000 gallons of sewage, immediately notify the Los Angeles County Department of Health Services. The State Office of Emergency Services must be notified if the spill, in the Incident Commander's discretion, presents a hazard to human health or environment. Additionally, if the spill exceeds 1,000 gallons, notify the Regional Water Quality Control

Board. **Any spill exceeding 1,000 gallons must be reported to the Regional Water Quality Control Board (RWQCB) within 3 hours of the time the problem was discovered and a written follow-up report must be filed within two weeks (see attached forms) *(Engineering needs to develop these forms)*.**

3. Based on his/her assessment of the situation, the Incident Commander shall declare the spill either a Stage I, Stage II, or Stage III spill in accordance with the following parameters:

   a. Stage I – Restrictions causing a flow rate contained in the manhole or overflowing at a rate not to exceed 5 gallons per minute (gpm).

   b. Stage II – Blockage or restriction causing overflow at a rate from 5 to 25 gpm.

   c. Stage III – Blockage or restriction causing overflow exceeding 25 gpm.

Stage I Spill Response Procedures

1. Contain the spillage immediately. If necessary, set up the bypass pump.

2. Determine the generation point of the spill (City line, County Sanitation Trunk line, or private property). If City generated, clear the restriction and proceed to Step 5. If County generated, contact County Sanitation Districts and proceed to Step 3. If generated from private property, contact the property's occupant of their responsibility to control the discharge and proceed to Step 4. If the occupant refuses to comply, contact Code Enforcement at (310) 318-0611 x 2418, or the County Health Department at (310) 519-6050.

3. Sanitation District Spills – City staff should continue to maintain containment of the spill until County crews arrive. Once County crews are on scene, the County is responsible for clearing the blockage and for cleanup, but the Incident Commander maintains responsibility for ensuring that the area is returned to its natural state. At the discretion of the City's Incident Commander, City crews may be required to assist in these operations. Proceed to Step 5.

4. Private Property Spills – City staff should continue to monitor the spill, how the spill is contained, and how materials are disposed. Ensure

proper containment and cleanup. At the discretion of the Incident Commander, City crews may be required to assist in containment and cleanup of a spill on private property, with all costs being back-charged to the responsible party(ies). If the spill should reach the public right-of-way, it is then the City's responsibility to ensure that the spill is contained and that proper cleanup measures are completed. Proceed to Step 5.

5. Take photographs of the spill and include them for review by the NPDES Coordinator and Department Head. If the spill did not generate from private property but has entered private property, a copy of the report and photos must be forwarded to Risk Management. Request permission of the occupant of the private property before taking any pictures on private property. Confine pictures to only the areas affected by the spill.

6. Determine the cause of the spill. Describe what caused the problem and what actions were taken to correct the situation. This information is required for Department records. If the spill occurs in a business area, or if it is suspected to have been the result of a commercial or business activity, contact the NPDES Coordinator to investigate.

7. Cleanup the spill area and remove containment. Leave the area as clean as practicable. Emphasis should be placed on removing all materials that are in or around the contaminated area. Wash down, disinfect and remove all run-off from all surfaces that were in contact with the spill.

   Under no circumstance is disinfectant-contaminated water allowed to enter a catch basin. All such water must be removed from the site (i.e. vacuumed up) and properly disposed of.

8. Check and clear downstream manholes. It is possible that debris may accumulate at the next downstream manhole following a backup. Always check the lower manhole to ensure that the line is flowing properly.

9 The Incident Commander must fill out a Sewer Spill Report form, if needed.

Stage II Spill Response

1. Berm the sewage flow, block all drainage inlets and set up to start pumping to the closest clear manhole as soon as possible.

2. Request assistance of other agencies and / or contract firms for additional pumps to stabilize the situation.

3. Make all notifications as specified within Stage I response plan.

4. If spill exceeds 5 gpm. for three (3) hours or twenty-five (25) gpm. for one (1) hour, immediately move to Stage III.

5. Complete Steps 2 through 9 of Stage I Response.

Stage III Spill Response

1. Perform all steps contained within Stage I and II Responses above.

2. Contact Yard for additional personnel and equipment to assist with traffic control.

3. Contact Police Dispatch and request assistance with traffic control, if needed.

Spill Response Follow-up

1. File completed Spill Report Forms and photographs with the NPDES Coordinator.

2. For spills involving 1,000 gallons or more, the NPDES Coordinator will prepare a written report which must be filed with RWQCB within two weeks of the spill. The report must contain the following information:

   a. estimated volume of spill and amount that was discharged to surface waters, i.e. into storm drains and/or channels.

   b. a discussion of the circumstances that caused the spill.

   c. a discussion on the impacts to public health or environment resulting from the spill and corrective actions taken to mitigate the effects.

3. Determine cause of blockage and ascertain whether line(s) needs to be placed on a higher maintenance schedule or if capital repairs are needed.

Outside Resources Contact List

1. Environmental Consultant:

John L. Hunter & Associates
13310 Firestone Boulevard, Suite A-2
Santa Fe Springs, CA 90670
Phone: (562) 802-7880
FAX: (562) 802-2297

2. Sewage Spill Response Companies

Baker Tanks
5500 Rawlings Avenue
South Gate, CA
Phone: (562) 904-3680

Allwaste
2222 E. Sepulveda Boulevard
Carson, CA
Phone: (310) 595-1000

National Plant Services
Long Beach, CA
Phone: (310) 436-7600

United Pumping Service, Inc.
14016 E. Valley Boulevard
City of Industry, CA
(818) 961-9326

Ocean Blue
(562) 624-4120

Outside Agency Notification Numbers

A. L.A. County Notification

1. When sewage enters storm drain system:

L.A. County Department of Public Works
Flood Maintenance Division
Contact: 24-hour emergency notification
Phone: (626) 458-4357

2. If spill is originating from a Sanitation District Trunk Line

Sanitation Districts of Los Angeles County
Phone: (562) 699-7411
After hours: (562) 437-6520

3. If spill exceeds 1,000 gallons:
Los Angeles County Health Department
Phone: (310) 519-6050
After hours: (310) 519-6050

B. Adjacent City Notifications

1. City of Manhattan Beach
Phone: (310) 545-5621 x 380
After hours: (310) 545-5621 x 222

2. City of Hawthorne
Phone: (310) 970-7955
After hours: (310) 970-7052

3. City of Lawndale
Phone: (310) 970-2160
After hours: (310) 671-7531

4. City of Torrance
Phone: (310) 618-5929
After hours: (310) 618-5641

5. City of Hermosa Beach
Phone: (310) 318-0214
After hours: (310) 318-0313

C. State Office of Emergency Services

1. When sewage spill presents hazard to human health or environment
State Office of Emergency Services
Hazardous Spills Notification
Phone: (800) 852-7550

D. Regional Water Quality Control Board

1. When spills exceed 1,000 gallons
Technical Support Unit
Spills Report Duty Officer
Phone: (213) 266-7552, if no answer
(213) 266-7500
After hours: (213) 774-4238
FAX: (213) 266-7600

SEWAGE SPILL PREVENTATIVE AND CORRECTIVE PROCEDURES

Routine Sewer Maintenance

1. All city sewer lines shall be maintained in accordance with the maintenance schedule as shown within the **Appendix** ***(this document is to be prepared by PW and included in manual).***

2. While conducting routine sewer maintenance activities, visually inspect the worksite to identify any of the following potential problems:

   a. cracked / deteriorating pipes

   b. leaking joints / seals at manholes

   c. chemical erosion of manhole channel, inlets or outlets

   d. evidence of sewage stacking in the manhole

   e. line generally flowing at or near capacity

3. Any potential problems noted are to be documented using a Work Order form and reported to the Maintenance Supervisor before the end of the workday.

4. The Maintenance Supervisor will be responsible for prioritizing and scheduling all repairs that may be practicable given budgetary constraints. Any repairs that may exceed budgetary constraints or other departmental authority shall be forwarded to the Public Works Director for budgetary consideration. Repairs shall be prioritized in accordance with the following parameters:

   a. problems causing overflows or which may cause an imminent overflow are to scheduled immediately. These repairs may be temporary until scheduled or capital improvements may be completed.

   b. problems that do not require immediate attention and are feasible to be performed within staff and budgetary constraints shall be scheduled as soon as practicable.

   c. problems requiring line rehabilitation, installing bypass lines, constructing new pump stations, etc., require capital improvements,

which must be forwarded through management to the City Council for funding authorization.

SANITARY SEWER AND STORM DRAIN CROSS-CONNECTION PROCEDURES

1. To ensure that cross-connections between the City's sanitary sewer and storm drain systems do not occur, the City maintains detailed records of the alignments of both systems and when they were constructed.

2. No connections to either system are allowed without a permit being first obtained from the City's Engineering & Building Department. Each such permit issued is to contain the following information:

   a. line to which the connection was made

   b. location of connection on the line

   c. depth of the connection at property line

   d. when the connection was made

3. A City inspector shall inspect all connections to either system to ensure that all of the above information is accurate and that the connection is made in accordance with established standards. Building Inspectors are responsible for inspecting all on-site connections, while Public Works inspectors are responsible for inspecting all connections within the public rights-of-way.

4. After approval of the connection inspection, the applicable inspector permanently files the inspection card and/or permit in the appropriate City file for perpetual maintenance.

INDUSTRIAL WASTE PROCEDURES

1. All businesses are required to obtain a business license at the time that they establish their business in the city. During this process, the Licensing Division will assist the business owner in determining the appropriate Standard Industrial Classification (SIC) Code number for the business and will record the same on the business license.

2. Copies of all business licenses will be forwarded to the NPDES Coordinator at least monthly.

3. The NPDES Coordinator shall perform an inspection of the business to determine if the business requires an industrial waste permit and to conduct a stormwater pollution prevention educational visit.

4. If the business does not require an industrial waste permit, the NPDES Coordinator shall notify the Licensing Division that the business is clear for operation.

5. The NPDES Coordinator shall notify the Licensing Division that the business requires an industrial waste permit either due to the nature of the business or due to the presence of existing industrial waste facilities, and shall contact the business owner to begin the application process.

6. The NPDES Coordinator will work with the business owner to effect the necessary pretreatment systems to prevent or reduce the discharge of deleterious materials to the sanitary sewer system, which could result in main line damages or blockages.

7. Upon issuance of an industrial waste permit, the NPDES Coordinator shall notify the Licensing Division that the business is clear for operation.

8. All businesses issued industrial waste permits shall be inspected one to four times per year, depending upon the nature of the permit, to verify that improper discharges to the sewer system are not occurring and that all pretreatment facilities are being properly maintained. The criteria for such inspections shall include, but shall not be limited to:

    a. observations for high or low pH.

    b. observations for excessive grease or sediment

    c. observations for flammable chemicals.

9. The NPDES Coordinator shall issue notices to all businesses found to be in violation of the conditions of their industrial waste permits and shall follow existing regulation to implement the necessary enforcement actions to gain compliance with the City's Municipal Code.